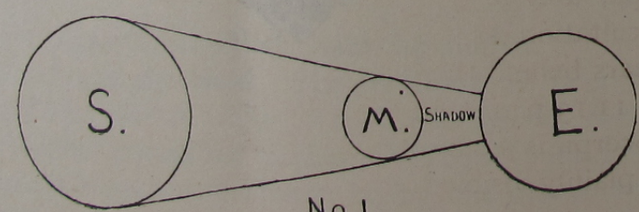
The Evening Sky—June 15 to July 15.

By Mrs. L. C. d'A. Lipscomb.

THE SUN.

On June 21st the Sun enters Cancer, and Summer commences. On the morning of June 17th there will be an annular eclipse of the Sun, visible at Greenwich as a partial eclipse, where it begins at 8.20 a.m., is greatest at 9.23, and ends at 10.31.

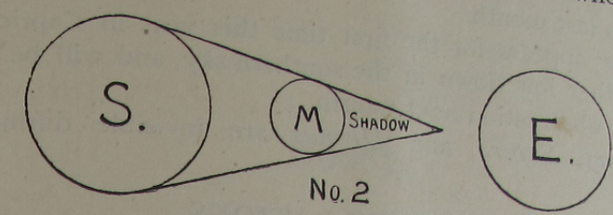
Every one knows that the Moon, when new, passes between the Earth and the Sun, sometimes above, sometimes below the latter as seen from the former, and that occasionally it is almost or even quite between those two bodies, cutting off part or all of the Sun's rays from the Earth. In the first case, when the Moon obscures the light from part of the Sun's disc only, we have a partial eclipse. In the second case, when the centre of the Moon crosses over the centre of the Sun, we have one of two phenomena. Either the entire surface of the Sun is obscured, when a total eclipse occurs, or the Moon does not quite cover the Sun, so that at the middle of the eclipse we see a ring of the Sun's light all round the dark body of the Moon and an annular eclipse takes place (Lat. annulas, a ring). The reason of this apparent difference I will endeavour to explain by two simple diagrams.



No. 1.

No. 1 represents a total eclipse, when the moon (which revolves round the Earth in an ellipse and not a circle, and therefore is not always at the same distance from it) being near

to us, appears as large as the Sun and hides the whole of its surface.



No. 2

No. 2 represents an annular eclipse, when the Moon, being at a greater distance from us, appears smaller and is not large enough to cover the whole of the Sun. This is what occurs on June 17th. But it will be readily seen that the whole of the ring of Sunlight can be visible only at the end of an imaginary line drawn through the centres of the Sun and Moon and produced until it touches the Earth. On this occasion the end of this line travels from N.W. Africa, from the mouth of the Gambia to Tripoli, thence across the Mediterranean, just touching the Island of Candia, to Asia Minor, passing over the most southerly portion of the Caspian Sea it continues through Turkestan to China. As it does not touch England, we only have a partial eclipse, and being north of it, we shall see the Moon crossing the southern portion of the Sun only, and cutting off a little more on its west than on its east side.

THE MOON.

New, June 17th; first quarter, June 25th; full, July 2nd; last quarter, July 8th.

A very interesting and easily-observed phenomenon takes place this month. It will be noticed that on the Map the Moon as delineated for June 29th is actually over the star called B Scorpii, and it does in fact pass between us and that star. The occultation, as it is called, begins at 9.59 p.m., when the star disappears behind the eastern limb (or edge) of the Moon, and ends at 11.13 p.m., when the star reappears at the western limb. As B Scorpii is a star of the second magnitude, this occultation will be plainly visible to the naked eye, if the night be fine.

THE PLANETS.

Venus is an evening star in Cancer, seen in the western sky shortly after sunset.

Mars is still visible in Scorpio. A short description of him was given last month.

Jupiter appears for the first time this year in Capricornus. He is rather low down in the southern sky, and will be better suited for observation next month.

Mercury, *Saturn*, and *Uranus* are invisible during the evenings.

CONSTELLATIONS.

Draco.—Part of this constellation is now overhead, and can be traced as it winds its way round the North Pole.

Hercules can always be traced by its position between the bright star Vega and the Corona Borealis, both of which are easily recognisable, but as it does not contain a star above the third magnitude, it has no particular interest to the naked eye.

Lyra, almost on the meridian, contains one of the most brilliant of the first magnitude stars in the northern hemisphere, being second only to Sirius in the opinion of many astronomers. It is pale sapphire in colour.

Sagitta can be distinguished by its three principal stars being in a straight line, two of which lie in the Milky Way.

Saggitarius, being on the meridian, is now in its most favourable position for observation, as it is near the horizon.

Serpeus and *Ophinchus* seem so intermingled that it is rather difficult to distinguish always between the two constellations. Ophinchus is supposed to be standing up, holding the serpent in his outstretched hands, one near the tail, the other near the head, so that it extends across him from one side to the other.

A. LIPSCOMB.

Books.

"En hoexkens ende boexkens."

I give, as I promised, a list of some of the foreign papers which deal more or less with subjects interesting to the readers of this Review. The list is only a preliminary one.

L'ami de la jeunesse (fortnightly).
L'école et la famille (fortnightly).
L'éducation—Journal des écoles primaires (weekly).
L'instruction publique (weekly).
Journal d'éducation populaire (every two months).
Magasin d'éducation (fortnightly).
Journal de l'enseignement primaire (weekly).
Manuel général de l'instruction primaire (weekly).
Progrès de l'enseignement primaire (monthly).
Revue internationale de l'enseignement (monthly).
Revue pédagogique (monthly).
Haus und Schule.
Cornelia—Deutsche Elternzeitung (monthly).
Schulfreund—L'ami des écoles (fortnightly).
Reform pädagogische (weekly).
Rundschau pädagogische (monthly).
Monica (weekly).
Erziehung (fortnightly).
Lehrerin (fortnightly).

All of these may be obtained in a week or ten days from the London foreign booksellers. Messrs. Nutt keep many of the papers in stock. I do not find any paper corresponding in aim with our Review except *Cornelia*, which in its last number has an excellent article on the "Art of Eating" (Nachdruck verboten, alas !), an important art, thinks the writer, "Wie der Mensch isst, so ist er." The rules laid down are not quite superfluous even for well-bred children. Our own literature ("Education in Early England," E. E. T. S.) tells us very forcibly how different from our own were the table-manners of the Middle Ages ; but the writer of the article takes us back to Ecclesiasticus which, as common property, we may quote ; for this excellent advice of Jesus, the son of Sirach, is not known to every one, "Eat as it becometh a man ; and devour not, lest thou be hated. Leave off first for manners' sake.